

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Julian D. Breckenridge

GENERAL INFORMATION:

Name:	Polymer Partners
Address:	1450 Commonwealth Drive Henderson, KY 42420
Date application received:	7/21/2006
SIC Code/SIC description:	3087, Custom Compounding of Purchased Plastics Resins
Source ID:	21-101-00125
Source A.I. #:	1831
Activity ID:	APE20060001
Permit:	F-03-012 R1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
<u>x</u> Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input checked="" type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

**EMISSIONS SUMMARY:** PERMIT MINOR REVISION (F-03-012 R1)

<b>Pollutant</b>	<b>Actual (tpy)</b>	<b>Potential (tpy)</b>
<b>PM<sub>10</sub> = PT</b>	<b>0.3233559</b>	<b>195.016925</b>
<b>VOC</b>	<b>1.5541552</b>	<b>0.2089080</b>
<b><u>Single Haps</u></b>		
Formaldehyde	0.0004843	0.0000031
Acrolein	0.0000614	0.0000003
Propionaldehyde	0.0001096	0.0000007
MEK	0.0001288	0.0000006
Acrylic Acid	0.0001485	0.0000004
Acetaldehyde	1.4026240	0.0979029
Xylene	0.0187382	0.0000931
Methylene Chloride	0	0.0000085
Phenol	0.5479000	0.0000956
Phthalic Anhydride	0.0013259	0.0000006
Biphenyl	0.0013259	0.0000006
Benzene	0.0010958	0.0000006
Styrene Dimer Isomer	0	0.0000109
Toluene	0.0146837	0.0013889
Styrene	0.2849080	0.0238957
Ethylbenzene	0.0438320	0.0034711
Acrylonitrile	0.0042736	0.0004895
Caprolactum	0.1753280	0.0029768
Other HAPs	0.0876640	0.0089565
<b>Total HAPs:</b>	<b>2.5846317</b>	<b>0.1392964</b>

**SOURCE DESCRIPTION:**

The Polymer Partners (previously named Clariant) located at Henderson, Kentucky, manufactures black plastic color concentrates through a process of compounding various polymer resins with carbon black, calcium carbonate and/or other filler materials. Physical processes taking place include pneumatically feeding raw materials from silos and dump stations equipped to handle super sacks of carbon black and plastic resins into hoppers on the compounding lines. Thermal processes include the heating of the polymer resin and additives to product specific temperature and mixing in the compounding line. The finished product is fed to a pelletizer and dewatering system. On July 21, 2006 the Division of Air Quality received an application for a minor revision to add new facilities and to change process rates in existing facilities. Polymer Partners will continue to operate in compliance with 401 KAR 52:030 of federally enforceable permits for non-major sources.

**EMISSIONS AND OPERATING CAPS DESCRIPTIONS:**

The emissions caps established in permit # F-03-012 will remain the same for permit # F-03-012 R1. Total VOC emissions shall not equal or exceed 90.0 tons per year and actual HAP emissions shall not equal or exceed 9.0 tons per year of any single or 22.5 tons per year of a combination of HAPs. These annual limitations shall not be exceeded during any consecutive 12-month period for the entire source.

**OPERATIONAL FLEXIBILITY:** None